

Gel Imaging Analysis Systems AST-2880



(not including computer)



◆Product Description

The automatic gel imaging analysis system is mainly used for the analysis and research of electrophoretic gel images and hybrid films, etc. It is fully automatic computer control and highly programmed to be easily operated, convenient and practical.

◆Product Features

- Multi-function control panel with touch keys, simple and convenient function selection.
- Zoom, focus, aperture, transmitted UV light and reflection light can be fully automatic controlled by software or chassis panel.
- The high-definition, high-quality images of scientific research CCD reflect more details of the picture, and the ability to analyze weak bands is stronger.
- It is much more intuitional and safe to have real-time observation through software or UV protection window.
- Photos can be saved in TIFF, JPEG and other common formats.
- Timing protection function: If no command is entered within 15 minutes, all light sources automatically turn

off, to extend service life.

- System automatically turns off all light sources at the same time, making more safe and efficient to experiment.

◆Technical Specification

CCD chip	1/2.5 inch, 3096(H) × 2080(V), 6.4 million pixels
Dynamic Range	4.5OD. 16bit gray scale, Double-stranded DNA stained by EB less than 20Pg
Image Size	5.7um × 4.28um
Pixel Merging	1×1, 2×2, 3×3, 4×4
Lens	High permeability electric lens, 8~48mm aperture F1:1.2 automatic, motorized lens
Exposure Time	0.294ms - 2000ms
Sensitivity	At least 0.01ngEB chromosome DNA can be detected
Detect the signal-to-noise Ratio	≥ 56dB
Excitation Light Source	300nm transmitted UV, 254, 365nm reflected UV
Projection Table	Ultra bright UV transmission station, area 210×260mm, blue and white light: 210×300mm (optional)
Optical Filter	Standard 590nm, compatible with EB, Sybr, GoldView and most of other fluorescent dyes
Software	JP-GEL 1D Image-Pro Plus
Input Power Supply	AC220V, 50/60Hz
Dimension (mm)	380x430x730
N.W.(kg)	18.1

Image Analysis Software

◆Product Description

It can be used for the imaging and analysis of DNA/RNA gel, protein gel, autoradiography film, enzyme label plate, thin layer chromatography plate, etc. And it can do aggregate analysis, molecular weight analysis, cluster analysis, homology analysis accurately for bands, spots and any other target region.

◆Product Features

- Background elimination, optical density analysis, band quantification, percentage content calculation, colony count and PCR product quantification, etc.
- Suitable for Coomassie bright blue and silver dyed protein glue, fluorescent dye dyed nucleic acid glue, GFP/eGFP analysis, micrographs.
- Autoradiography, Dot Blot analysis, Northern/Western Blot analysis, microplate, Macroarray high-throughput analysis, etc.
- Analysis results can be directly output in Excel tables, and automatically generate reports, easy to archive and call.
- Integration of analysis software and image acquisition software: image capture, analysis of electrophoresis gel, dot blotting, narrow line blotting and colony counting, etc.
- Complete on the same interface.

Molecular weight determination

The molecular weight determination function can be applied to DNA/RNA gel experiment, which can be used for lane correction and strip automatic identification. The molecular weight of each electrophoresis strip can be automatically calculated according to Marker and output in Excel table for easy analysis.

Accurate area density calculation

The parameters in a certain area can be customized calculation, such as area density value and average density value.

Rapid and simple quantitative analysis

It can quantitatively analyze nucleic acid and protein in rectangle, circle, contour line or any random region, and realize accurate concentration analysis such as molecular weight calculation, band quantification, RF value and percentage content.

Flexible lane and strip analysis

The horizontal and vertical degrees of the strip can be adjusted manually for more accurate data.

